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October 13, 1998

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Office of the Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

**RE: Comments of Mitsubishi Electric America
In the Matter of Carriage of the Transmissions of Digital
Television Broadcast Stations. CS Docket No. 98-120**

Dear Sir or Madam:

Mitsubishi Electric America hereby submits comments in the above proceeding. Attached you will find the original document and nine copies for distribution to each Commissioner.

Sincerely,

John A. Savage
Executive Vice President
Mitsubishi Electric America

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY**

In the matter of

Carriage of the Transmissions
Of Digital Television Broadcast Stations

Amendments to Part 76
Of the Commission's Rules

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CS Docket No. 98-120

Comments of Mitsubishi Electric America

Submitted by:

**John Savage
Executive Vice President
Mitsubishi Electric America
1150 Connecticut Avenue, NW
Suite 1010
Washington, DC 20036**

October 13, 1998

I. Introduction and Summary

Mitsubishi Electric America ("MEA") is pleased to provide comment with respect to the Federal Communications Commission's Notice of Proposed Rulemaking regarding the Carriage of the Transmissions of Digital Television Broadcast Stations. We applaud the Commission for its comprehensive review of the issues surrounding the introduction of digital television that are identified in the NPRM.

MEA is incorporated in the United States and is the holding company for seven US subsidiaries employing over 2300 individuals at more than 15 locations. In 1997, MEA companies generated approximately \$2 billion (US) in revenue on sales of consumer, commercial, and industrial products in domestic sales, including exports.

We have a long-standing commitment to digital television and a multifaceted role in its deployment. MEA companies have succeeded in developing the first generation of high-definition televisions and are involved in the design and manufacture of digital broadcast equipment, semiconductors, and software technologies that enable DTV.

MEA believes it is essential that the Commission provide appropriate guidance to ensure that the transition to digital television is successful by encouraging the widespread availability of DTV signals in US homes through cable or off-air reception.

MEA will rely upon the judgement of the Commission to settle the difficult issues involving must carry during the transition period. Our overriding concern, however, and one that we feel is key to the ultimate success of digital television, is that digital signals be carried in the format in which they were originally broadcast.

MEA strongly supports the CEMA view that it is imperative consumers have the right to access high-definition signals in their original format to realize the enormous market potential for digital television. We have significant concerns of any degradation of digital signals and of Cable Systems not passing the highest quality of HDTV.

The Government's goal of an early recovery of analog spectrum will be at risk and the market for DTV will fail to reach its potential, if consumers are not confident of accessing high-definition signals in their original format.

II. 1394 Interface Issues Merit Continued Oversight by the Commission

MEA is a strong advocate of the 1394 interface as a standard to connect DTV receivers and STB's. The consumer electronics and cable industries continue to work toward a market-based solution in developing the 1394 interface. However, given the importance of this issue, MEA believes that the Commission should continue to carefully monitor this process to ensure that all the parties agree upon a single and generally accepted method.

As long as there is progress toward a single connection method, there is no need for intervention by the Commission. At this time, we feel that such progress is being made.

III. Mitsubishi Digital Receivers Enable Modular Approach to DTV

MEA will begin selling a full range of DTV receivers in a few weeks and recognizes the practical need for consumers to eventually connect these televisions to cable systems to receive DTV programs. In anticipation of this need, MEA has implemented a modular approach that will permit subsequent upgrades to accommodate cable without any need to replace the television.

Consumers who purchase one of our large screen televisions have the option of deciding when to upgrade to DTV reception while still enjoying Mitsubishi's highest quality viewing experience with today's analog TV.

Consumers who invest in this year's "HDTV ready" televisions can upgrade to an external HDTV receiver that will support cable as soon as those standards can be implemented. Consumers who purchase the 8-VSB receiver this year will need only to replace the box to upgrade later.

In future years, MEA sees a two-phased approach. As we commented in Section II of our submission, we feel that a standard for the 1394 interface will be achieved soon. We believe this interface can provide the quickest way to allow DTV receivers to function with the wide variety of cable systems. We expect this interface to be made available on future DTV receivers for purchase by

customers who previously bought the first generation televisions, providing full cable access.

The next phase occurs when the remaining cable standards are sufficiently defined to permit the manufacture of a fully integrated DTV television receiver that can connect directly to the cable system without external boxes.

MEA recommends that the Commission address the issue of "cable ready" DTV in a future proceeding that takes into account the anticipated collaboration of the CEMA and OpenCable processes. As noted before, the Commission should continue to monitor this situation.

IV. Material Degradation Threatens the Success of HDTV

Since two-thirds of Americans depend on cable to deliver their broadcast signal, decisions to be made regarding material degradation are key to the success of high-definition television. HDTV owners will be denied the full value of their investment, if broadcasters' 1080-I or 720-P signal is degraded to a lower quality format.

Other types of material degradation that negatively impact the consumers' ability to enjoy high-definition programming should also be restricted.

Broadcasters will be less inclined to make the necessary investments to provide signals of the highest resolution if there is no opportunity for consumers to watch them in this format. The transition to digital could be put in jeopardy as a result.

V. Cable Systems Must Pass Through Broadcast Signals Without Degradation

As we remarked earlier, it is crucial that digital broadcast signals be passed through to the consumer in its original format without any change in resolution or degradation of image quality through recompression. To preserve the rights of consumers and broadcasters to select the highest resolution available, it is imperative that the Commission act to prevent any degradation within this intermediate path. Processing of broadcasters DTV signals within the cable head-end, should be limited to frequency shifting and/or remodulation. Processing by digital cable boxes should be minimized and limited to tuning and demodulation for over-the-air broadcasts.

VI. Remote Control Issues Warrant Market Driven Solutions

Functions, features, and capabilities of remote controls have proven to be a complex and ever-changing aspect of design for manufacturers. Remote control devices undergo substantial alteration on a yearly basis in response to consumer preferences, product capability advances, and market-driven demands. While the transition to DTV presents new challenges in this area, we expect that manufacturers will continue to supply solutions that meet consumer needs. Therefore, the imposition of regulations by the Commission is not necessary.

VII. Copy Protection

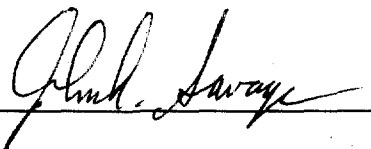
Copy protection issues will be adequately addressed by industry in accordance with voluntary industry standards. The Commission should, however, carefully monitor this process to ensure that limited progress in copy protection negotiations does not emerge as an impediment to the introduction of DTV.

VIII. Conclusion

Mitsubishi Electric America thanks the Commission for the opportunity to provide its views on this matter and strongly urges the adoption of rules that will preserve the ability of the consumer to access broadcasters high-definition signals in its original format and quality.

Respectfully Submitted,

BY

A handwritten signature in dark ink, appearing to read "John Savage", written over a horizontal line.

John Savage
Executive Vice President
Mitsubishi Electric America

October 13, 1998